

# Claims

- [c1] 1–Procedures and methods for electrical actuation of non–biological artificial muscles, such as ionic polymeric synthetic artificial muscles and electroactive polymers, by means of action potential generated by biological nerve, such as mammalian sciatic nerve.
- [c2] 2– Procedures and methods for using the nerve of a biological system or entity to generate an action potential, which is subsequently, amplified and applied to a sample of an electro–active ionic polymeric artificial muscle to cause it to bend, flex, deform, stretch, contract and twitch.
- [c3] 3– Procedures and methods for using the nerve of a biological system or entity to generate an action potential, which is subsequently, amplified and applied to a sample of an electro–active artificial muscle, material or system to cause them to deform, change shape, become dynamically active, bend, flex, stretch, contract and twitch.